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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/216,036	12/18/1998	RICHARD H. WARREN	97-904CIP1	1325

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MCDERMOTT, WILL & EMERY
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
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2686

22

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/216,036

Applicant(s)

WARREN, RICHARD H.

Examiner

Naghmeh Mehrpour

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8 is/are pending in the application.
- 4a) Of the above claim(s) 1-2 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4 and 8 is/are allowed.
- 6) ☒ Claim(s) 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 2/14/04 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claim 5**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Mallinckrodt (US Patent Number 5,940,753) in view of Bond et al. (US Patent Number 3,836,969).

Regarding **Claim 5**, Mallinckrodt teaches a satellite communication system wherein,

aligning a first satellite antenna 22 to illuminate a plurality of satellites (See figure 1 b, antenna on top of the car 22 is a small diameter and transmits wide beam signals to both satellites (62) and receive from one of the satellites 62, (Column 8 lines 44-53);

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transmitting a communication signal from the first satellite antenna to the plurality of satellites, See figure 1 b, return signal is shown generates from satellites (62(20)); and

broadcasting a return signal from each of the plurality of satellites based on the communication signal, See figure 1 b, return signal is shown generates from satellites (62(20));

aligning a second large satellite antenna 42 to receive the return communication signal from only one of the plurality of satellites (62(20)), (See figure 1b, the antenna 42 has a large diameter generate a narrow beam signal).

Mallinckrodt fails to teach that a satellite antenna repositioning system for repositioning the second antenna when the sun transits within the beamwidth of the second antenna, a receiver for receiving communication signals at one of the first and second antenna, the receiver including an antenna switch selector for selectively activating second antenna during periods when the sun transits within a beamwidth of the first antenna. However Bond teaches a satellite antenna repositioning system for repositioning the second antenna when the sun transits within the beamwidth of the second antenna (See figures 5a, 7, 9, Column 5 lines 23-50, Column 9 lines 3554). Bond also teaches a receiver for receiving communication signals at one of the first and second antennas, the receiver including an antenna switch selector for selectively activating second antenna during periods when the sun transits within a beamwidth of the first antenna (Column 11 lines 7-14). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to provide the above teaching of Bond to Mallinckrodt, in order for satellite system to avoid sun transit outage.

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Regarding **Claim 2**, Mallinckrodt teaches that a diameter of the second 42 and third 46 satellite antenna is greater than a diameter of the first satellite antenna 22 (See figure 1 b, numerals 42, 46, 22).

Allowable Subject Matter

4. **Claims 3-4, 6, 8**, are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding **Claim 3**, the record of prior art fails to teach a point-to-multipoint satellite communication system as specifically mentioned on Claim 3.

Regarding **Claim 6**, the record of prior art fails to teach a method of performing satellite communication in a point-to-multipoint communication system as specifically mentioned on Claim 6.

Regarding **Claim 8**, the record of prior art fails to teach an earth station for use in a point-to-multipoint communication system including a small satellite and plurality of adjacent geostationary satellite, the earth station as specifically mentioned on Claim 8.

Response to Arguments

5. Applicant's arguments filed 2/14/03 have been fully considered but they are not persuasive.

In response to applicant's argument that Mallinckrodt fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (the second communication signal from the at least one earth station then illuminates at least two of the plurality of adjacent geostationary satellites that retransmit the second communication signal) are

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not recited in the rejected claim 5. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Mallinckrodt shows the following limitation as exactly recites in claim 5. Mallinckrodt teaches:

aligning a first satellite antenna 22 to illuminate a plurality of satellites (See figure 1 b, antenna on top of the car 22 is a small diameter and transmits wide beam signals to both satellites (62) and receive from one of the satellites 62, (Column 8 lines 44-53);

transmitting a communication signal from the first satellite antenna to the plurality of satellites, See figure 1 b, return signal is shown generates from satellites (62(20)); and

broadcasting a return signal from each of the plurality of satellites based on the communication signal, See figure 1 b, return signal is shown generates from satellites (62(20));

aligning a second large satellite antenna 42 to receive the return communication signal from only one of the plurality of satellites (62(20)), (See figure 1b, the antenna 42 has a large diameter generate a narrow beam signal). Mallinckrodt fails to teach that a satellite antenna repositioning system for repositioning the second antenna when the sun transits within the beamwidth of the second antenna, a receiver for receiving communication signals at one of the first and second antenna, the receiver including an antenna switch selector for selectively activating second antenna during periods when the sun transits within a beamwidth of the first antenna. However Bond teaches a satellite antenna repositioning system for repositioning the second antenna when the sun transits within the beamwidth of the second antenna (See figures 5a, 7, 9, Column 5 lines 23-50, Column 9 lines 35-54). Bond also teaches a receiver for receiving communication signals at one of the first and second antennas, the receiver including an antenna

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switch selector for selectively activating second antenna during periods when the sun transits within a beamwidth of the first antenna (Column 11 lines 7-14). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to provide the above teaching of Bond to Mallinckrodt, in order for satellite system to avoid sun transit outage.

Conclusion

6. Any responses to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308--6296, (for formal communications indented for entry)

Or:

(703) 308-6306, (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Va., sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Melody Mehrpour whose telephone number is (703) 308-7159. The examiner can normally be reached on Monday through Thursday (first week of bi-week) and Monday through Friday (second week of bi-week) from 6:30 a.m. to 5:00 p.m.

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If attempt to reach the examiner are unsuccessful the examiner's supervisor, Lester Kincaid be reached (703) 306-3016.

NM

July 19, 2004

MEHRPOUR
PATENT EXAMINER

